ARM CPM WG 2005 Fall Meeting **October 12-13, 2005**
Stony Brook, New York **Wang Center at the Stony Brook University / SUNY**

Wednesday October 12

8:00 am	**Morning refreshments**	
8:30 am	Meeting introduction / logistics / goal / ARM status	*W. Ferrell, W. Wiscombe, M. Zhang and S. Klein*

Case 5: Mixed-Phase Arctic Cloud Experiment (M-PACE)

8:50 am	Synoptic overview of M-PACE clouds	*J. Harrington*
9:30 am	Modeling and observations of Arctic clouds	*H. Morrison*
10:10 am	Mesoscale simulations of the October 9-11 mixed phase stratus case: Sensitivity to cloud-aerosol processing	*A. Avramov*
10:30 am	**Break**	
10:50 am	Use of an LES with bin microphysics to study ice initiation under Arctic M-PACE and tropical TWP-ICE conditions	*A. Fridland*
11:10 am	GISS SCM simulations of the M-PACE case study: sensitivity to environmental conditions and cloud microphysical processes	*S. Menon*
11:30 am	M-PACE forcing: sensitivity and impact on SCM simulations	*S. Xie*
11:50 am	Presentation of M-PACE SCM/CRM case	*S. Klein*
12:00 pm	M-PACE Discussion	
12:10 pm	**Lunch**	

Convection Studies – Cloud Resolving Models

1:30 pm	Numerical study of precipitation sensitivity to dimensionality	*X. Zeng*
1:50 pm	Study of aerosol-cloud-radiation interaction with a cloud-resolving model: Towards the development of aerosol/cloud parameterizations for GCMs	*S. Chin*
2:10 pm	The impact of dynamic and upper boundary conditions on cloud resolving model simulations	*W.-K. Tao*
2:30 pm	A statistical comparison of tropical convective cloud systems simulated by a CRM with Earth Observing System satellite observations	*Y. Luo*
2:50 pm	CSU Multi-scale Modeling Framework (MMF): Recent results	*M. Khairoutdinov*
3:10 pm	Preliminary results of the Goddard MMF	*J. Chern*
3:30 pm	**Break**	

Convection Studies – CRMs (continued)

3:50 pm	A new parameterization of momentum transport by organized convective clouds and comparison with CRM	*A. Cheng*
4:10 pm	ISCCP cloud type analysis for Case 3	*S. Krueger*
4:30 pm	An update on the work of the GCSS deep convective working group case 5	*J. Petch*

Convection Studies – GCM parameterizations

4:50 pm	A climatology of fair-weather cumuli at the ARM SGP	*L. Berg*
5:10 pm	A dual mass-flux framework for boundary layer convection	*R. Neggers*

5:30 pm Adjourn

6:00 pm **Cocktail hosted by M. Zhang**

Thursday October 13

8:00 am **Morning refreshments**

8:30 am	The diurnal cycle of precipitation in models with parameterized convection	*D. Randall*
8:50 am	Single-column modeling of an idealized shallow to deep cumulus transition and comparison with CRM simulations	*C. Bretherton*
9:10 am	Understanding a climate model bias over the SGP: Inferences from SCM and GCM forecasts of the June-July 1997 IOP	*S. Klein*

Frontal and Low Cloud Systems

9:30 am	Evaluation of mesoscale model cloud simulations of the March 2000 SGP IOP	*G. Tselioudis*
9:50 am	Frontal cloud simulations from CAM3 and WRF during the ARM March 2000 IOP	*J. Wu*
10:10 am	Observational constraints on cloud thermodynamic phase in mid-latitude storms	*A. Del Genio*

10:30 am **Break**

10:50 am	Results from the *I*mprovement of *M*icrophysical *P*a*R*ameterization through *O*bservational *V*erification *E*xperiment (IMPROVE)	*B. Colle*
11:10 am	Analysis of low cloud parameterization in CAM3	*W. Lin*

Grab-bag

11:30 am	Evaluation of a stochastic shortwave subroutine in a SCM	*D. Veron*
11:50 am	New development of auto-conversion parameterization	*Y. Liu*

12:10 pm **Lunch**

1:30 pm	Parameterizing the dependence of surface albedo on solar zenith angle in the NCEP forecast models using ARM observations	*F. Yang*

Observations

1:50 pm	Cloud radiative forcing at NSA during the M-PACE period	*G. G. Mace*
2:10 pm	In-situ observations of cloud microphysics during M-PACE	*G. McFarquhar*

2:30 pm	Retrieval of cloud phase over the ARM-NSA site using MODIS 6.7 - 12 micron data	*D. Spangenberg*
2:50 pm	Radiosonde observations at Pt. Reyes and low-level cloud properties derived from satellite	*T. Inoue*
3:10 pm	The New ARSCL	*P. Kollias and E. Clothiaux*
3:30 pm	**Break**	
3:50 pm	Update of NASA Langley cloud products for model evaluation and assimilation	*K. Ayers*
4:10 pm	Variability in cloud amount and shortwave radiation across the SGP network area from surface measurements: Watta ya want?	*C. Long*
4:30 pm	Current status and future plans for ARM instrumentation	*J. Liljegren*
4:50 pm	ARM CPM WG Business and meeting wrap-up	*M. Zhang and S. Klein*
	- TWP-ICE plans	
	- CLASIC plans	*L. Berg*
	- Data enhancements at ARM Archive	*S. Xie*
5:15 pm	**Adjourn**	